

# **Automation 12 -**

## **Group**

## **Requirement**

## **(KC)**

**Copyright note**

Be who you want to be, thanks

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# **Introduction**

We have a way forward in the world of Quark



# 1

## BPP-9452: ACCA - QnA

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## Group Requirement

### 1 General output overview



#### Illustration 1: Output for QnAs with group requirement and group scenario

---

This is the group scenario.

##### Required

This is the group requirement.

- 1 This is the first question requirement.
  - (a) This is the first sub-question requirement.
  - (b) This is the second sub-question requirement.
- 2 This is the second question requirement.

##### Solution

- 1 This is the first question debrief
    - (a) This is the first sub-question debrief
    - (b) This is the second sub-question debrief
  - 2 This is the second question debrief.
- 



#### Illustration 2: Output for QnAs with group requirement only

---

This is the group requirement.

- 1 This is the first question scenario.

##### Required

This is the first question requirement.

- 2 This is the second question requirement.

##### Solution

- 1 This is the first question debrief.
  - 2 This is the second question debrief
-

## 2 Test scenarios

### 2.1 Illustrations



#### Illustration 3: First question with scenario and requirement

---

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question scenario.

##### Required

This is the first question requirement.

- 2 This is the second question requirement.

##### Solution

- 1 This is the first question debrief.

- 2 This is the second question debrief.
- 



#### Illustration 4: First question with requirement

---

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question requirement.
- 2 This is the second question requirement.

##### Solution

- 1 This is the first question debrief.

- 2 This is the second question debrief.
- 



#### Illustration 5: First question with requirement, sub-question with scenario.

---

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question requirement.
  - (a) This is the sub-question scenario.

##### Required

This is the sub-question requirement.

- 2 This is the second question requirement.

##### Solution

- 1 This is the first question debrief.

- (a) This is the sub-question requirement.
- 2 This is the second question debrief.
- 



## Illustration 6: First question with scenario and requirement (with group scenario)

This is the group scenario.

### Required

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question scenario.

### Required

This is the first question requirement.

- 2 This is the second question requirement.

### Solution

- 1 This is the first question debrief.
- 2 This is the second question debrief.
- 



## Illustration 7: First question with requirement (with group scenario)

This is the group scenario.

### Required

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question requirement.
- 2 This is the second question requirement.

### Solution

- 1 This is the first question debrief.
- 2 This is the second question debrief.
- 



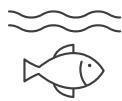
## Illustration 8: Group requirement with tables, lists and images

This is the group requirement.

Table header	Table header
Table text	Table text

- This is a list in the group requirement
- Bullet point

### Test image



- 1 This is the first question requirement.
- 2 This is the second question requirement.

### Solution

- 1 This is the first question debrief.
  - 2 This is the second question debrief.
- 



### Illustration 9: Group requirement with MCQ/MRQ components

This is the group requirement.

- 1 This is the first question requirement.
  - ( A) Option 1
  - ( B) Option 2
  - ( C) Option 3
- 2 This is the second question requirement.
  - ( A) Option 1
  - ( B) Option 2
  - ( C) Option 3

### Solution

- 1 The correct answer is: Option 1
  - 2 The correct answer is: Option 1
- 



### Illustration 10: Group requirement with MCQ/MRQ components (with group scenario)

This is the group scenario.

#### Required

This is the group requirement.

- 1 This is the first question requirement.
  - ( A) Option 1
  - ( B) Option 2
  - ( C) Option 3
- 2 This is the second question requirement.
  - ( A) Option 1

Option 2

Option 3

#### Solution

- 1 The correct answer is: Option 1
  - 2 The correct answer is: Option 1
- 

## 2.2 Activities



### Activity 1: First question with scenario and requirement

---

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question scenario.

#### Required

This is the first question requirement.

- 2 This is the second question requirement.
- 



### Activity 2: First question with requirement

---

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question requirement.
  - 2 This is the second question requirement.
- 



### Activity 3: First question with requirement, sub-question with scenario

---

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question requirement.
  - (a) This is the sub-question scenario.

#### Required

This is the sub-question requirement.

- 2 This is the second question requirement.
- 



### Activity 4: First question with scenario and requirement (with group scenario)

---

This is the group scenario.

### **Required**

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question scenario.

### **Required**

This is the first question requirement.

- 2 This is the second question requirement.
- 



## **Activity 5: First question with requirement (with group scenario)**

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This is the group scenario.

### **Required**

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- 1 This is the first question requirement.
  - 2 This is the second question requirement.
- 



## **Activity 6: Group requirement with tables, lists and images**

---

This is the group requirement.

Table header	Table header
Table text	Table text

- This is a list in the group requirement
- Bullet point



- 1 This is the first question requirement.
  - 2 This is the second question requirement.
- 



## **Activity 7: Group requirement with MCQ/MRQ components**

---

This is the group requirement.

- 1 This is the first question requirement.

(o) Option 1

(o) Option 2

Option 3

- 2 This is the second question requirement.

Option 1

Option 2

Option 3

---



## Activity 8: Group requirement with MCQ/MRQ components (with group scenario)

---

This is the group scenario.

### Required

This is the group requirement.

- 1 This is the first question requirement.

Option 1

Option 2

Option 3

- 2 This is the second question requirement.

Option 1

Option 2

Option 3

---

# Activity answers

---

## Activity 1: First question with scenario and requirement

- 1 This is the first question debrief.
- 2 This is the second question debrief.

## Activity 2: First question with requirement

- 1 This is the first question debrief.
- 2 This is the second question debrief.

## Activity 3: First question with requirement, sub-question with scenario

- 1 This is the first question debrief.
  - (a) This is the sub-question debrief.
- 2 This is the second question debrief.

## Activity 4: First question with scenario and requirement (with group scenario)

- 1 This is the first question debrief.
- 2 This is the second question debrief.

## Activity 5: First question with requirement (with group scenario)

- 1 This is the first question debrief.
- 2 This is the second question debrief.

## Activity 6: Group requirement with tables, lists and images

- 1 This is the first question debrief.
- 2 This is the second question debrief.

## Activity 7: Group requirement with MCQ/MRQ components

- 1 The correct answer is: Option 1
- 2 The correct answer is: Option 1

## Activity 8: Group requirement with MCQ/MRQ components (with group scenario)

- 1 The correct answer is: Option 1
- 2 The correct answer is: Option 1

# Test your learning

---

## 1 First question with scenario and requirement.

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- (a) This is the first question scenario.

### Required

This is the first question requirement.

- (b) This is the second question requirement.

## 2 QnA with title and first question with scenario and requirement.

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- (a) This is the first question scenario.

### Required

This is the first question requirement.

- (b) This is the second question requirement.

## 3 First question with requirement

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- (a) This is the first question requirement.

- (b) This is the second question requirement.

## 4 First question with requirement, sub question with scenario

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- (a) This is the first question requirement.

- (i) This is the sub-question scenario.

### Required

This is the sub-question requirement.

- (b) This is the second question requirement.

## 5 First question with scenario and requirement (with group scenario)

This is the group scenario.

### Required

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

- (a) This is the first question scenario.

**Required**

This is the first question requirement.

- (b) This is the second question requirement.

**6 First question with requirement (with group scenario).**

This is the group scenario.

**Required**

This is the group requirement.

A second paragraph in the group requirement. The quick, brown fox jumps over a lazy dog. Bawds jog, flick quartz, vex nymphs.

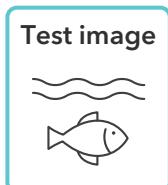
- (a) This is the first question requirement.  
(b) This is the second question requirement.

**7 Group requirement with tables, lists and images.**

This is the group requirement.

Table header	Table header
Table text	Table text

- This is a list in the group requirement
- Bullet point



- (a) This is the first question requirement.  
(b) This is the second question requirement.

8

Table header	Table header
Table text	Table text

This is text in the group requirement, authored underneath the table.

- (a) This is the first question requirement.  
(b) This is the second question requirement.

- 9 (a) This QnA is here to test that the numbering continues correctly. This is the first question requirement.  
(b) This is the second question requirement.

10

- This is a list in the group requirement
  - Bullet point
- (a) This is the first question requirement.

(b) This is the second question requirement.

**11 Group requirement with MCQ/MRQ components.**

This is the group requirement.

(a) This is the first question requirement.

Option 1

Option 2

Option 3

(b) This is the second question requirement.

Option 1

Option 2

Option 3

**12 Group requirement with MCQ/MRQ components (with group scenario)**

This is the group scenario.

**Required**

This is the group requirement.

(a) This is the first question requirement.

Option 1

Option 2

Option 3

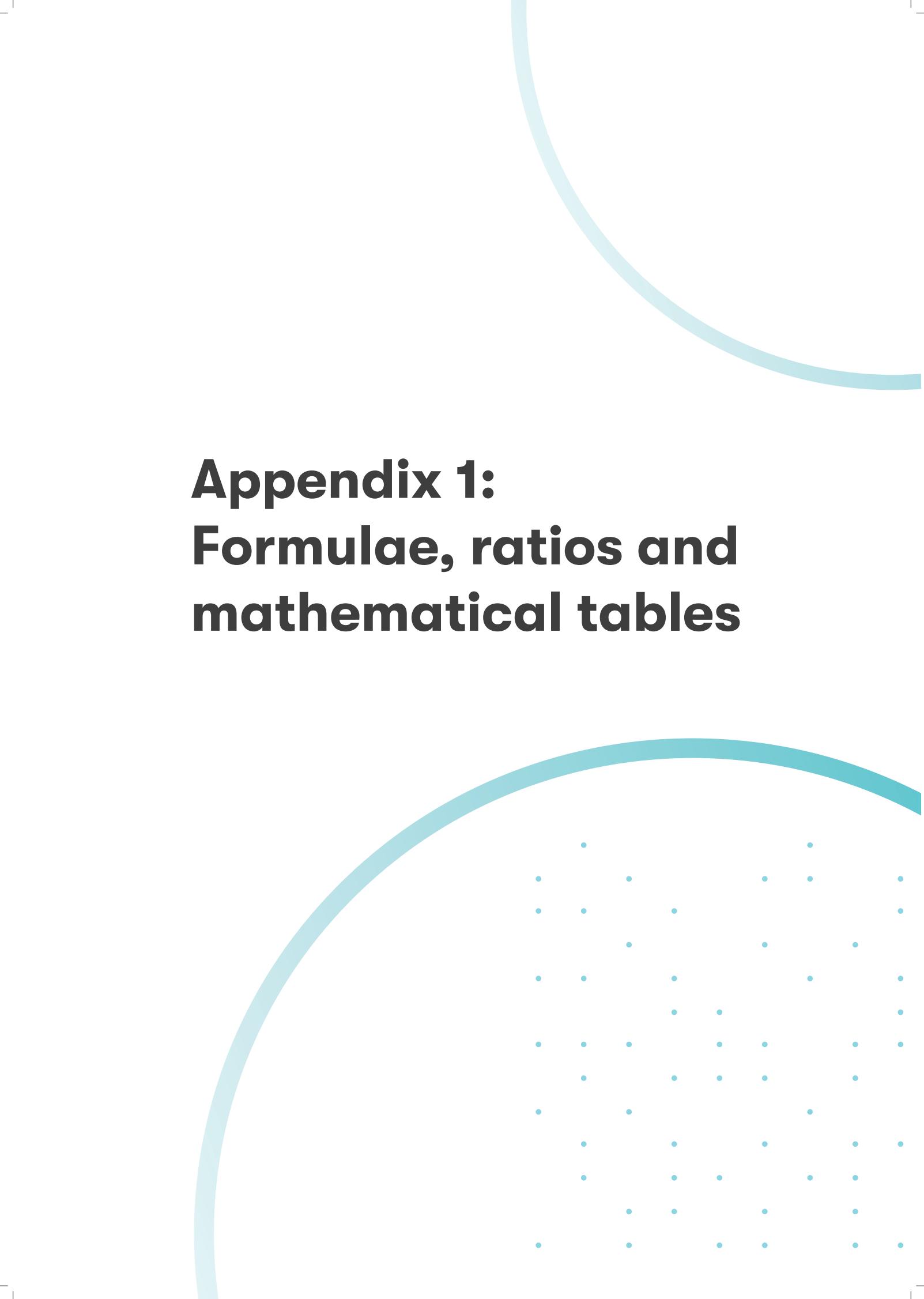
(b) This is the second question requirement.

Option 1

Option 2

Option 3





# **Appendix 1: Formulae, ratios and mathematical tables**



## Appendices

### Appendix A: Formulae and ratios that you need to learn

Profitability ratios:

$$\text{ROCE} = \frac{\text{Profit from operations (before interest and tax)}}{\text{Capital employed}}$$

Debt ratios include:

$$\text{Gearing} = \frac{\text{Value of debt}}{\text{Value of equity (or debt + equity)}}$$

$$\text{Interest cover} = \frac{\text{Profit from operations}}{\text{Interest}}$$

Liquidity ratios:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Shareholder investor ratios include:

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Share price}} \times 100$$

$$\text{Earnings per share (EPS)} = \frac{\text{Profits after tax - preference dividend}}{\text{Number of ordinary shares}}$$

$$\text{Price to earnings ratio (P/E)} = \frac{\text{Share price}}{\text{EPS}}$$

### Working capital ratios

Operating cycle = inventory days + receivable days – payables days

Inventory days = inventory/cost of sales × 365

Receivables days = trade receivables/(credit) sales × 365

Payables days = trade payables/(credit) purchases × 365

Sales to net working capital ratio = sales/net working capital (excl cash)

Cost of capital formulae:

$$K_d = \frac{I(1 - t)}{P_0}$$

$$K_p = \frac{d}{p}$$

Other useful formulae to learn:

$$IRR = a\% + \left[ \frac{NPV_a}{NPV_a - NPV_b} \times (b\% - a\%) \right]$$

$$\text{Total shareholder return} = \frac{\text{dividend gain} + \text{capital}}{\text{share price at start year}}$$

$$EAC = \frac{\text{NPV of costs}}{\text{Annuity factor for life of the project}}$$

$$\text{Profitability index} = \frac{\text{Present value of cash inflows (or NPV of the project)}}{\text{Present value of cash outflows}}$$

## **Appendix B: Mathematical tables**

### Present Value Table

## Annuity Table

## **Formula Sheet**

### Economic Order Quantity

$$= \sqrt{\frac{2C_0D}{C_H}}$$

### Miller-Orr Model

$$\text{Return point} = \text{Lower limit} + \left(\frac{1}{3} \times \text{spread}\right)$$

$$\text{Spread} = 3 \left| \frac{\frac{3}{4} \times \text{transaction cost} \times \text{variance of cash flows}}{\text{Interest rate}} \right|^{\frac{1}{3}}$$

### The Capital Asset Pricing Model

$$E(n) = R_f + \beta_i(E(r_m) - R_f)$$

### The asset beta formula

$$\beta_a = \left[ \frac{V_e}{(V_e + V_d(1-T))} \beta_e \right] + \left[ \frac{V_d(1-T)}{(V_e + V_d(1-T))} \beta_d \right]$$

### The Growth Model

$$P_0 = \frac{D_0(1+g)}{(r_e - g)} \quad r_e = \frac{D_0(1+g)}{P_0} + g$$

### Gordon's Growth Approximation

$$g = br$$

### The weighted average cost of capital

$$WACC = \left[ \frac{V_e}{V_e + V_d} \right] k_e + \left[ \frac{V_d}{V_e + V_d} \right] k_d(1 - T)$$

### The Fisher formula

$$(1 + i) = (1 + r)(1 + h)$$

## Purchasing Power Parity and Interest Rate Parity

$$S_1 = S_0 \times \frac{(1 + h_c)}{(1 + h_b)} \quad F_0 = S_0 \\ \times \frac{(1 + i_c)}{(1 + i_b)}$$

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**\*\*\*THE DOCUMENT HAS ERRORS\*\*\***

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